

be learned from a comprehensive division of specific groups than from the throwing together of various types of varieties. I have no controversy with Professor Shimek on account of his opinion that Pleistocene and recent species do not differ, but I do object to the dogmatic manner of stating that his opinion represents the truth and that all those who differ with him in this respect are mistaken. I honor Professor Shimek for his great work in the study of Pleistocene faunas, especially the loess faunas, and we must all give him credit for having established beyond doubt the fact of the aeolian genesis of these interesting deposits.

I regret the necessity that calls forth this criticism but the remarks above cited cannot remain unchallenged.

SHELL COLLECTING ON THE WEST MEXICAN COAST, II

BY H. N. LOWE

Before leaving Mazatlan, letters were secured to the Governor of the Tres Marias Islands, Mexico's penal colony, making a visit to that place possible.

Obtaining passage on a small cargo boat, the "Dos Hermanos," the trip was made in eighteen hours, landing at Balleto, the administration headquarters on Isl. Maria Madre.

This lies in the eastern, or lee side of the island and was rather poor for shore collecting. About six miles S. W. at another prison camp called Salinas where sea salt is evaporated in shallow cement basins, the sand beach gives way to flat shelving rocks and coral below low water. On these rocks were the finest specimens of the giant *Patella* I have ever seen, not eroded by heavy surf like so many are nor encrusted with foreign matter. Even the large specimens showed the fine sculpture.

A horseback trip was made to the north west end of the island, to the prison camp at Rio Hondo where I stayed

three days. On the beach at Rio Hondo, I was told there were no shells. But here I had my best luck. Under rocks, at and below extreme low water I found living specimens of *Mitra lens* and a large *Cardita* buried in the sand under stones and large bunches of coral. Some extremely beautiful *Chitons* were taken here.

At Playa de Cameron, they said there were plenty of shells. After a two hours ride on horseback and an equal distance further on foot we reached the place only to find the beach swept clean of shells. Immediately after storms there may be an abundance of shells on these beaches but at other times there is nothing.

On one rocky point midway on the South coast the large *Patella* and *Chiton petholatus* Sby. were so numerous they could have been taken by the thousand at extreme low tide, but at other times they were inaccessible owing to the heavy surf. The shells were of very poor quality however and not worth much as specimens.

A few species of small land shells were found alive under stones, but the most diligent search failed to disclose a single live *Oxystyla*. I suppose they must burrow into the soil during the dry season. Almost every dead shell had been broken into by the parrots or other large birds which were very plentiful. I found these conditions the same at Manzanillo and Acapulco, but further south at San Gerónimo in the State of Oaxaca, I found another species of *Oxystyla* estivating in plain sight on the trunks of small trees on the brush-covered hills. (See Plate 3).

After ten pleasant days spent on the islands I was fortunate to secure passage on the Mexican coast guard boat "Guaymas" for a none too comfortable trip to Manzanillo.

With a set of low tides here, I had good luck under small stones pried loose with a bar, on the inside of the breakwater. In other places there was little or nothing, so that before the construction of the breakwater, Manzanillo must have been a poor place for shells.

Off the headland just west of town, I had extremely good

luck dredging in twenty-five fathoms. Beautiful *Pleurotoma*, *Terebra*, *Turritella*, *Lyria*, etc., were thus secured.

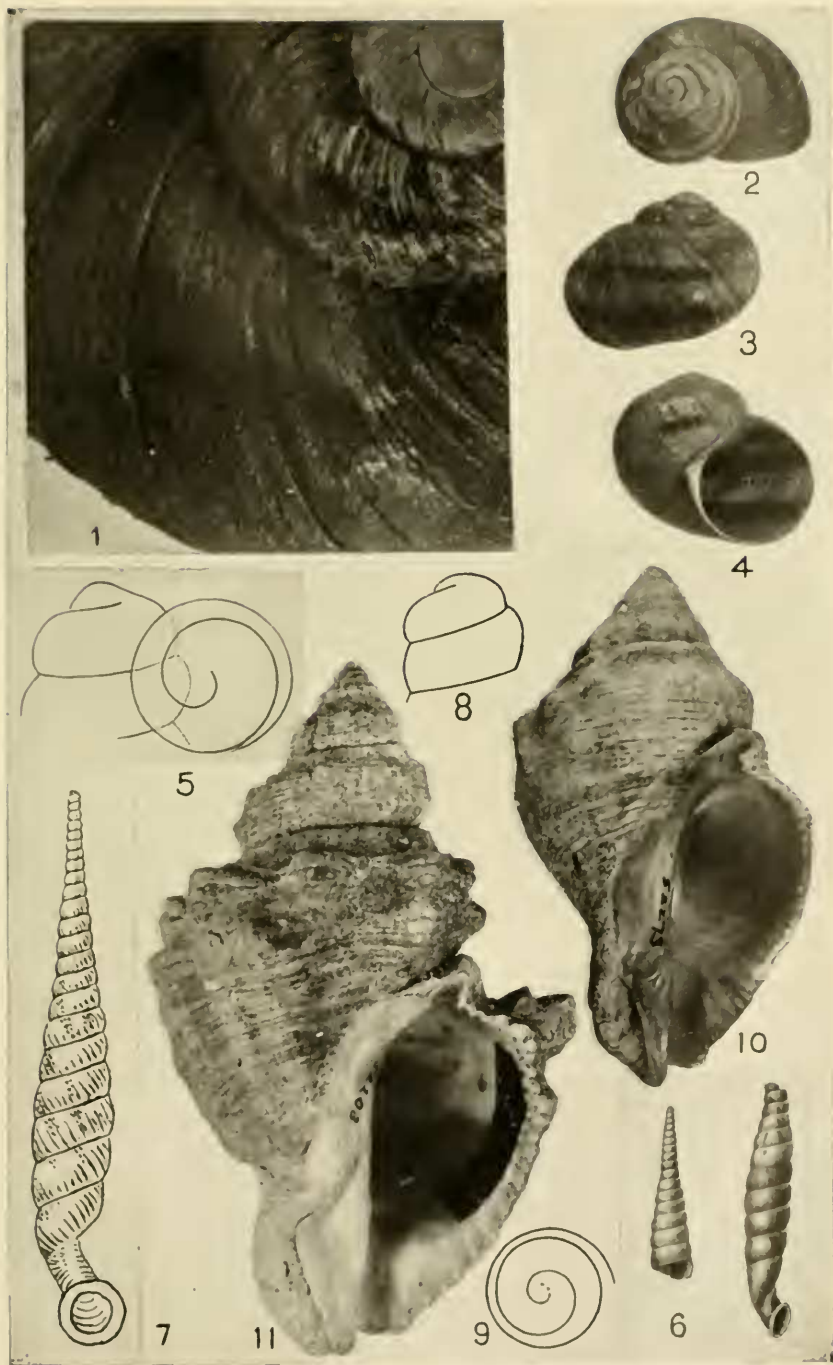
From Manzanillo, I went by steamer "Bolivar" to Acapulco. This beautiful landlocked harbor apparently so favorable to molluscan life along its steep shore line is almost destitute of specimens. But in a few coves and beaches on the outer coast five or six miles from town much better collecting was found at low tide.

A small crowbar is absolutely necessary to dislodge the rocks which seem to be grown together with foreign in-crustations.

Dredging here was even better than at Manzanillo and a very pleasant pastime in the early morning hours before the heat of the day—the dredgings sorted over at leisure in the flower filled patio of the Hotel Jardin.

Every day at sunset the Indian women brought to the plaza great baskets of shells and fancy articles made from them. By keeping careful watch every day a number of rarities were picked up. The large number of bivalve species seem to be washed up only after storms, and one vendor would have species which none of the others had found. Considerable bargaining was necessary, for they always asked about twice what they expected to get, and for showy *Murex* they asked more than the curio stores in the States. During Holy Week the women did a thriving business with the crowds from the Capitol, many of whom had never seen the ocean and bought largely of artificially colored coral, sea horses, porcupine fish and the large *Strombus* and *Murex*.

The next port south, Salina Cruz, has been completely sanded up for several years making access by water impossible. The only way to reach it was by auto to Mexico City, thence by train to Vera Cruz where connections are made with the Guatemala road and the Isthmian line. From San Geronimo, the junction with the Guatemala road, the trains run but three times a week to Salina Cruz. So, as luck would have it, I had three days to spend in this windy.



Figs. 1-4. *Humboldtiana palmeri* Clench und Rehder. Figs. 5, 6. *Urocoptis livida atkinsi* Torre and Clench. Figs. 7-9. *Urocoptis livida barbouri* Torre and Clench. Figs. 10, 11. *Thais floridana haysae* Clench, NAUTILUS XLI, p. 6.